ABSTRACT OF THE DISCLOSURE

A film-forming system comprising a vacuum chamber and an electroconductive partition plate dividing said vacuum chamber into a plasma generating space provided with a high-frequency electrode and a film-forming treatment space provided with a substrate-retaining mechanism for holding a substrate mounted thereon. A gas for generating desired active species by discharge plasma is introduced into the plasma generating space. Said desired active species are supplied to the film-forming treatment space through a plurality of penetration holes formed in the electroconductive partition plate for communicating the plasma generating space with the film-forming treatment space. Said electroconductive partition plate has a first internal space separated from the plasma generating space and communicating with the film-forming treatment space via a plurality of material gas diffusion holes. A material gas is introduced from the outside into said first internal space and supplied into the film-forming treatment space through a plurality of said material gas diffusion holes. Said electroconductive partition plate further has a second internal space separated from said first internal space and communicating with said film-forming treatment space via a plurality of gas diffusion holes. A gas other than said material gas is introduced from the outside into said second internal space. A film is deposited on the substrate by a reaction between said active species and said material gas supplied to said film-forming treatment space.